

# North Carolina Biotechnology Center

Overview and Impact

February 19, 2013

# Agenda

- About Biotechnology
- About NC's Industry
- About the Center
  - Key Performance Indicators
  - Partner Organizations
  - Budget
- Looking to the future

# About Biotechnology – High Impact Industry

- Potential to heal, fuel, feed the world
- Average salary - \$78,348
- 4 additional jobs for each biotech job
- 237,665 total jobs



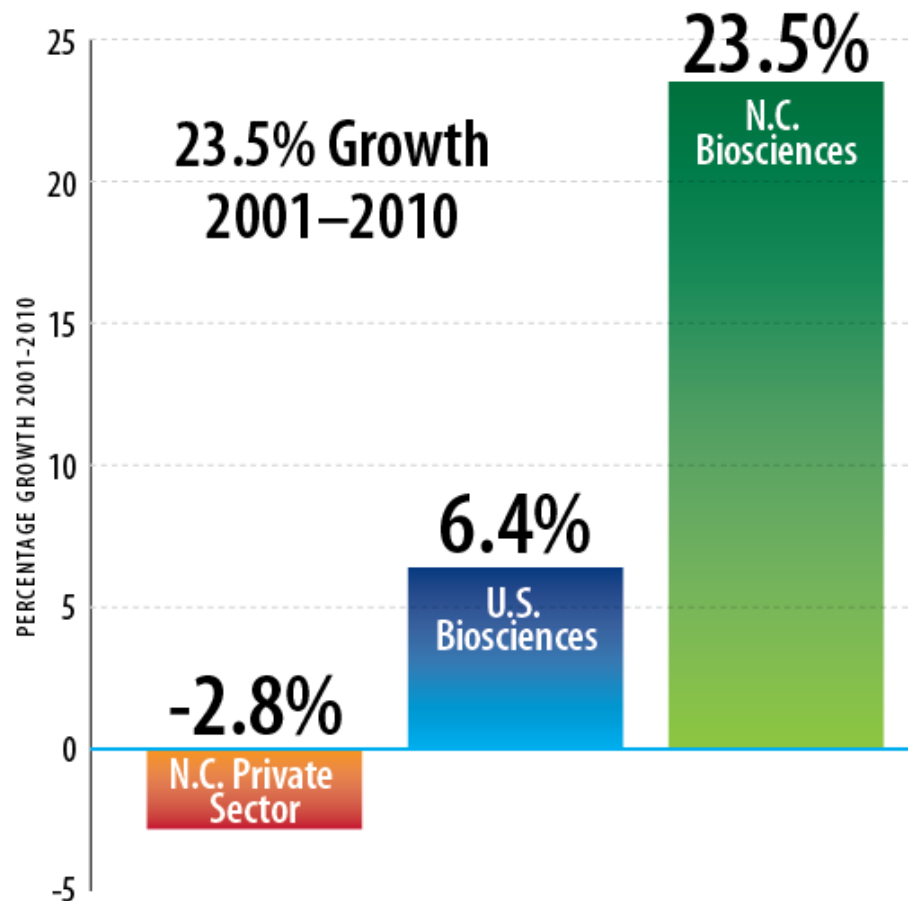
# Biotech in NC – Annual Economic Impact

58,000 employees at 500+ companies create:

- \$59.0 billion in total economic activity
- 237,665 total jobs
- \$14.8 billion in employee compensation
- \$1.73 billion in state and local revenues

# Biotech in NC – Fastest Growing

Of the top ten states for biotechnology, North Carolina has the fastest job growth.



# **ABOUT THE CENTER**

NORTH CAROLINA BIOTECHNOLOGY CENTER

# About NCBiotech - What We Do

First of its kind

Focus on job creation

Accelerate technology

Portfolio of programs

- Innovation
- Business
- Education
- Economic Development

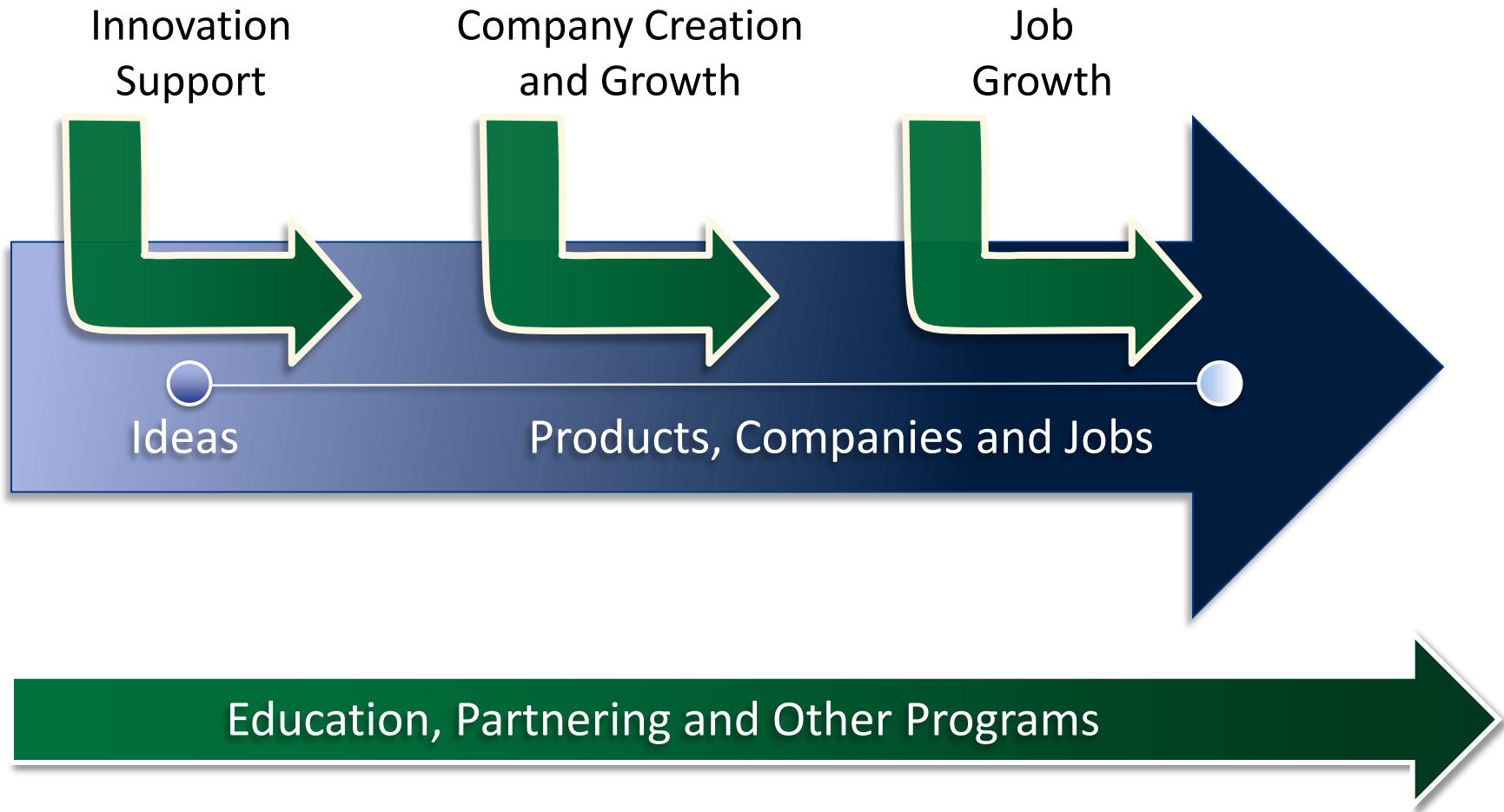


# About NCBiotech – Programs

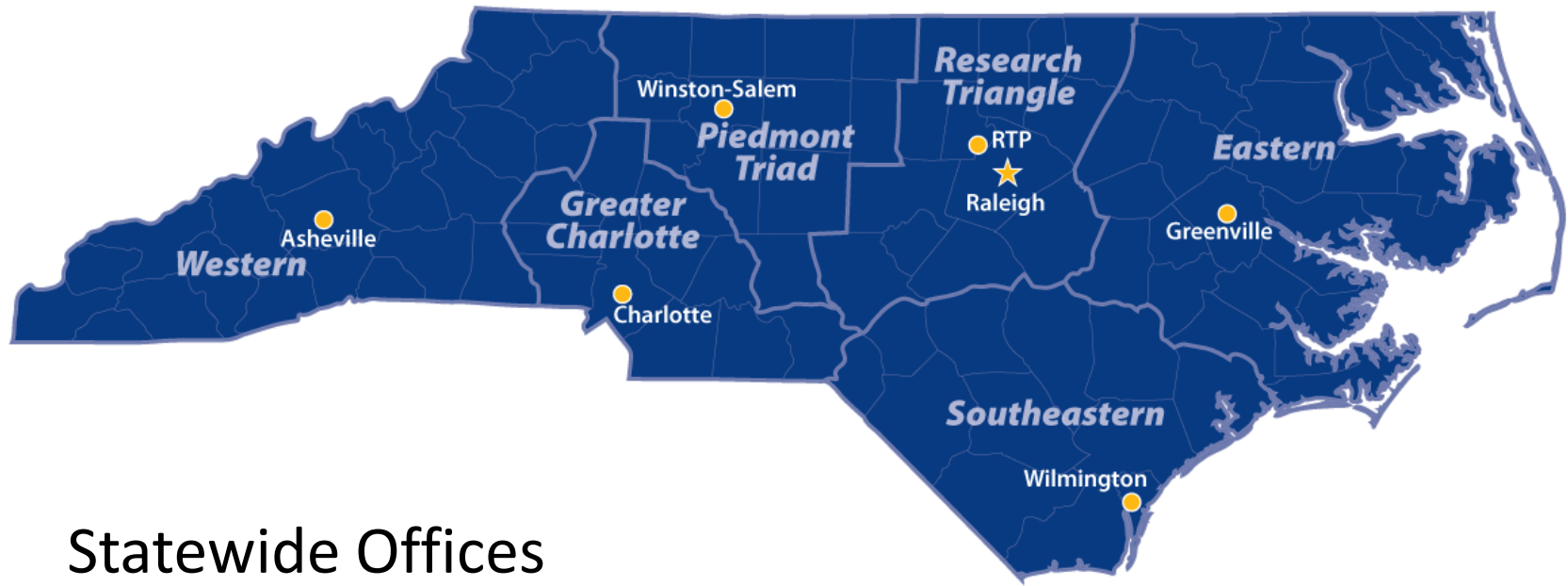




# About NCBiotech – Programs



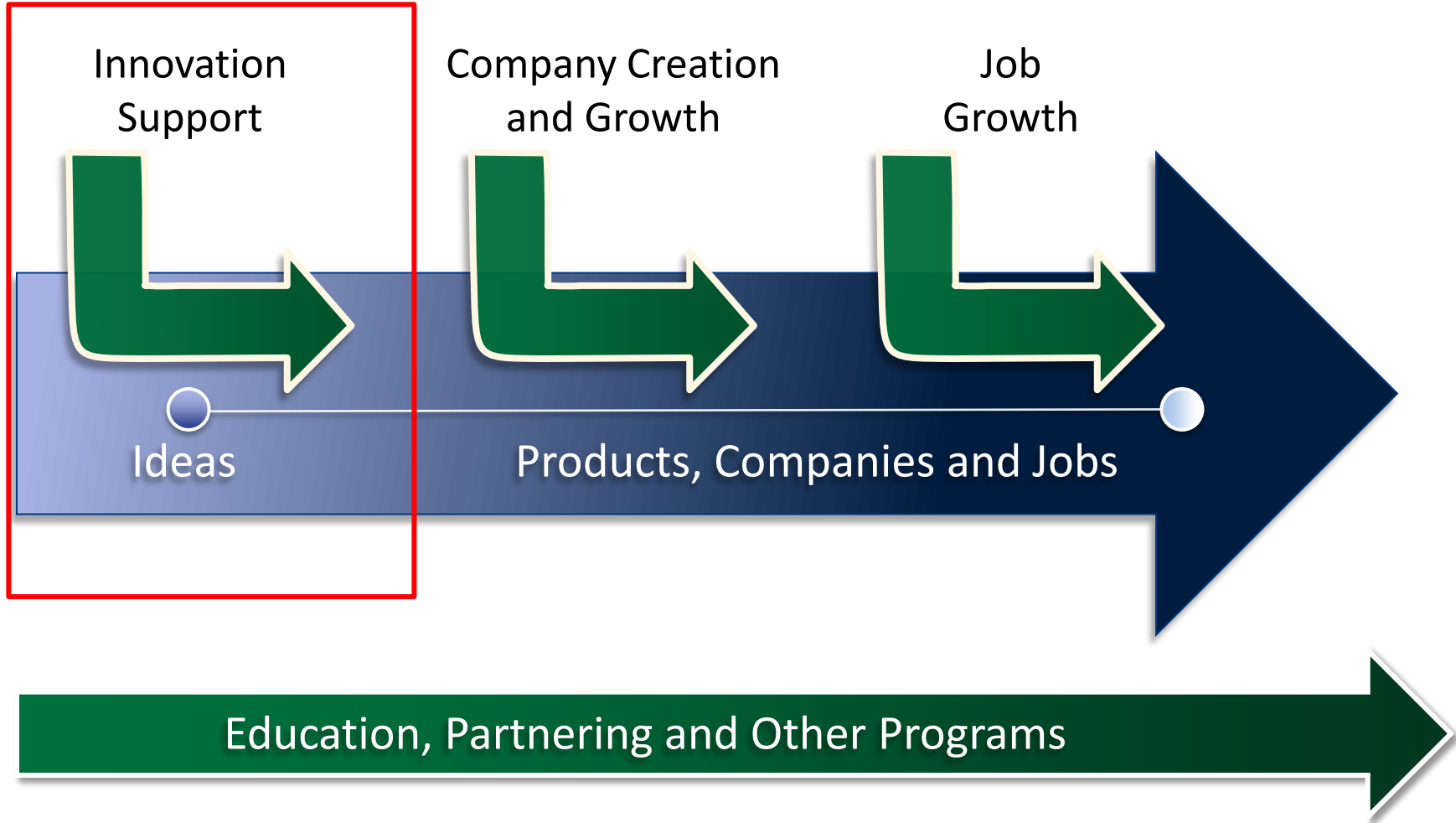
# About NCBiotech – Statewide Offices



## Statewide Offices

- Western (Asheville)
- Greater Charlotte
- Piedmont Triad (Winston-Salem)
- Research Triangle Park
- Eastern (Greenville)
- Southeastern (Wilmington)

# About NCBiotech – Programs



# Innovation Support KPIs

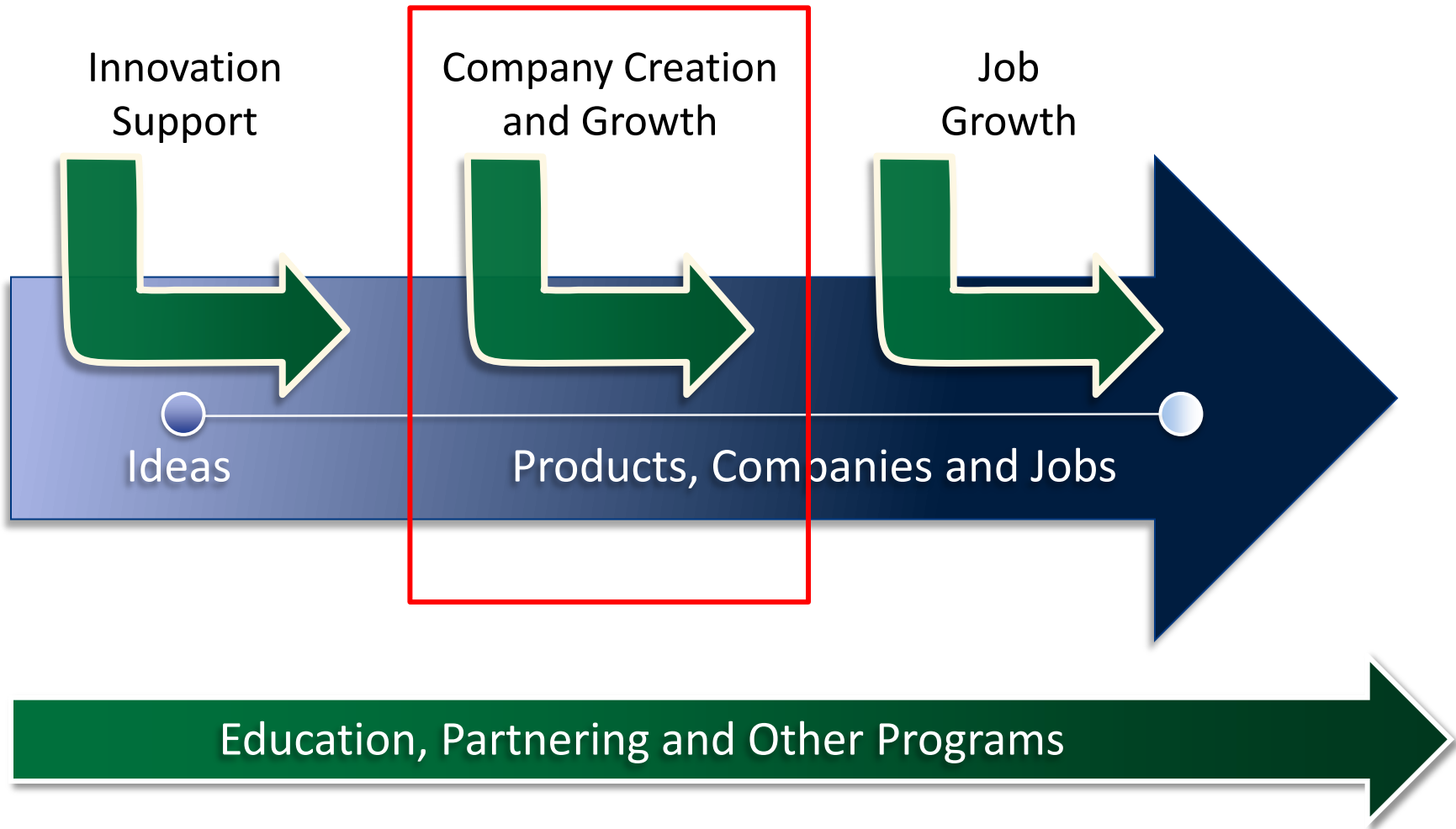
## **Grants to build capacity statewide and university/company partnerships**

\$98 million granted; Return per \$1 granted:

- Collaborative Funding (\$69.64)
- Faculty Recruitment (\$54.92)
- Institutional Development (\$9.49)
- Multidisciplinary (\$4.32)
- Biotech Research (\$4.14)

Annual Direct Cost: \$801,181

# About NCBiotech – Programs



# Company Creation and Growth KPIs

## Small company loans and growth support

- 139 companies
- \$22.2 million loaned
- \$2.6 billion in follow-on funding
- \$117 leveraged per \$1 loaned
- Created 2,830 new jobs
- 54 company launches

Annual Direct Cost: \$680, 171

# Company Creation and Growth KPIs

## Sector growth – Centers of Innovation

- Four active COIs
  - Advanced medical technologies
  - Nanobiotech
  - Marine
  - Personalized medicine
- Launchibiliti – Program with Mission Hospital to take staff ideas to products.

Annual Direct Cost: \$366,598

# Company Creation and Growth KPIs

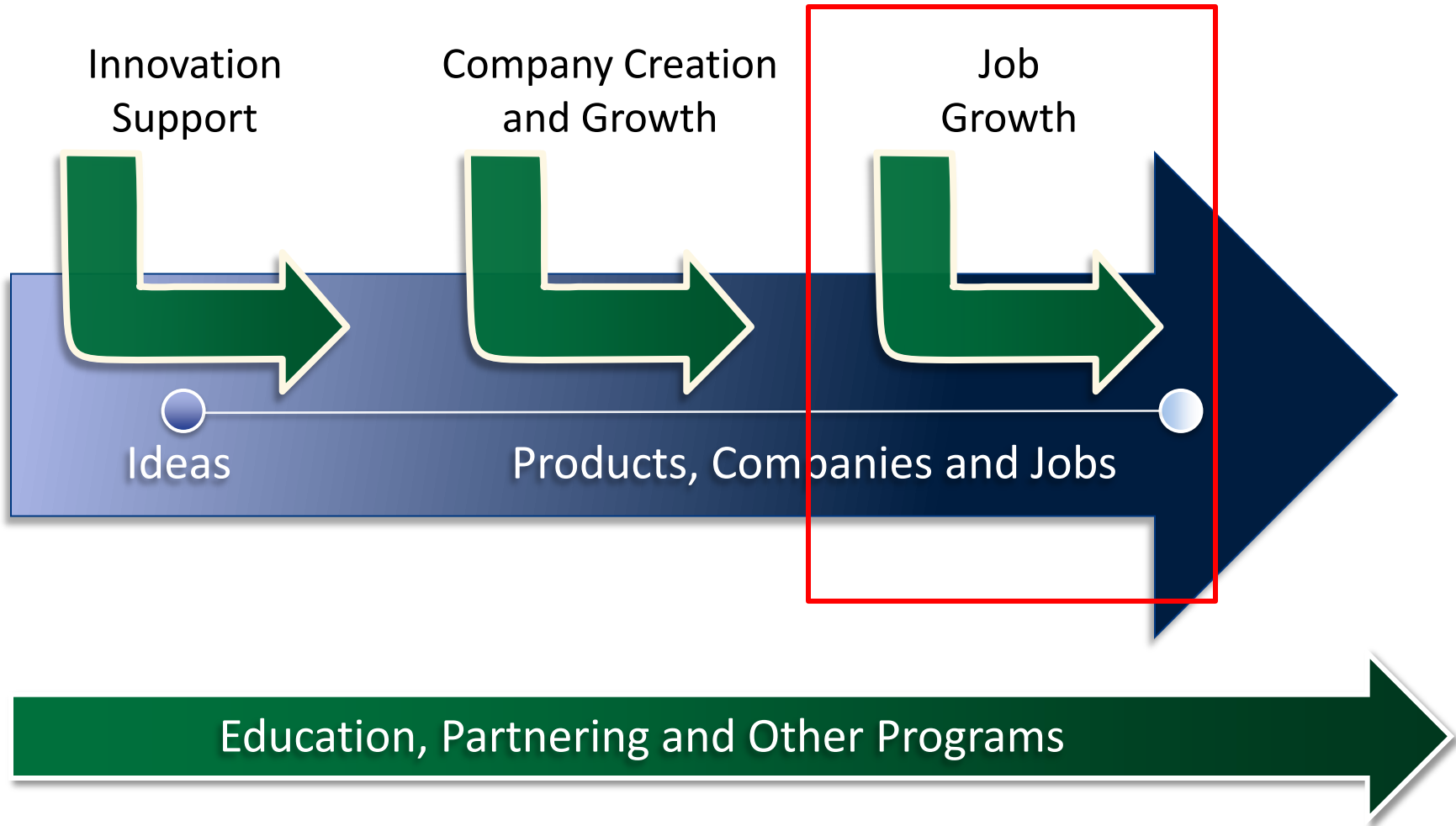
## Sector growth – AgBiotech

- Biotech Crops Commercialization Center saved \$50M+ for NC meat animal industry.
- Leveraged \$929,550 in private funds for programs over 3 years.
- Company profile directory helps NC companies find technology development partners.

Annual Direct Cost: \$579,731



# About NCBiotech – Programs



# Job Growth KPIs

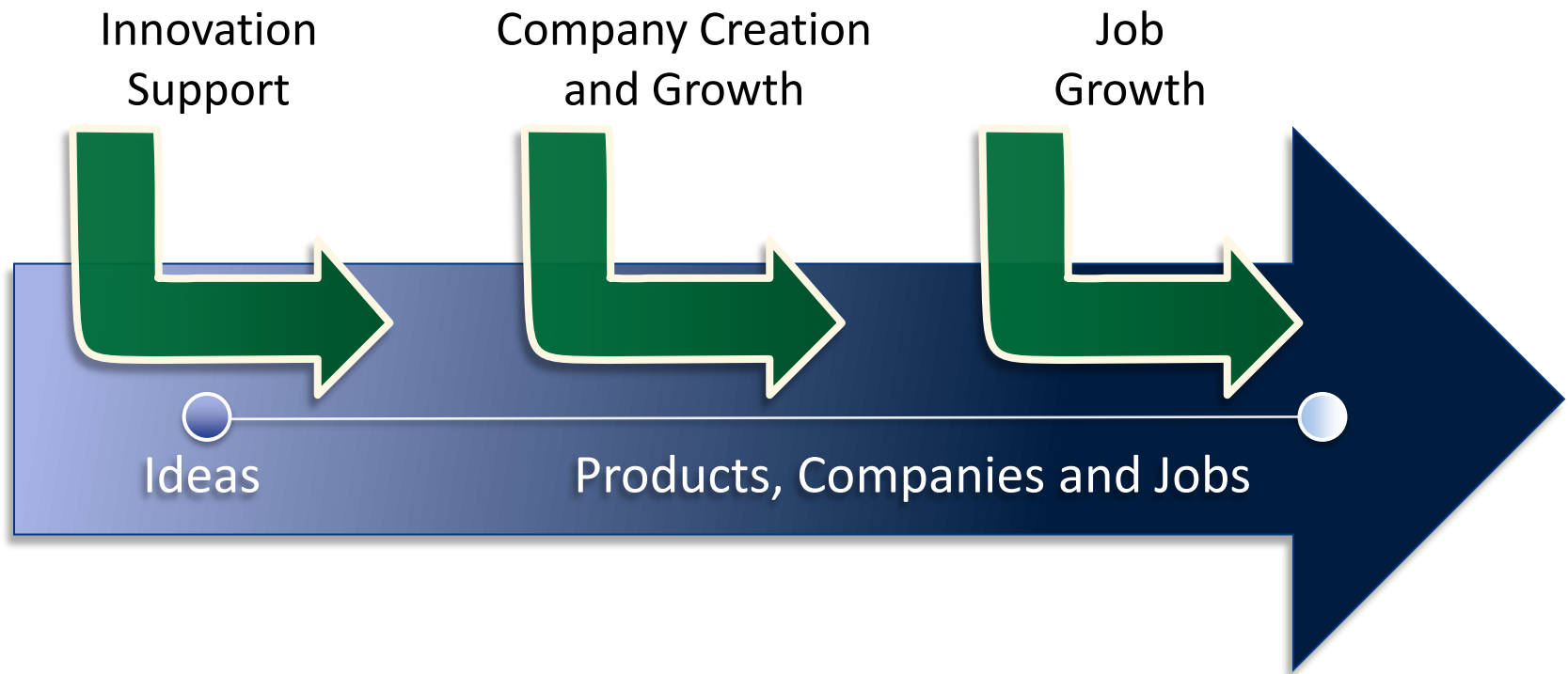
## Company recruitment, expansion and retention

Since 2008:

- 24 company expansions to/within NC
- 1,700+ jobs
- 7,800+ total jobs
- \$2.0B in economic activity
- \$59 million in state and local taxes

Annual Direct Cost: \$363,186

# About NCBiotech – Programs



Education, Partnering and Other Programs

# Education KPIs

## Workforce development and teacher training

- 1900+ teachers trained;
- 50,000 students reached each year
- \$7M for lab equipment & courses
- 8,000+ BioWork manuals distributed to colleges

Annual Direct Cost: \$656,455

# 2012 Budget/Metrics Summary

| Categories               | Dollars     | Metrics                      |
|--------------------------|-------------|------------------------------|
| Company Creation         | \$1,626,500 | \$1 --> \$117                |
| Job Growth               | \$363,186   | 1,754 jobs; \$2.0B           |
| Innovation               | \$801,181   | \$1 --> \$69                 |
| Education                | \$656,455   | 50,000 students annually     |
| Partnering, etc.         | \$2,828,448 | Thousands of participants    |
| Statewide                | \$1,643,326 | Increased funding to regions |
| Awards (all programs)    | \$8,648,062 | (\$9.8M budget FY2013)       |
| Indirect/Other Costs/Rev | \$1,895,579 |                              |

# **SIMILAR ORGANIZATIONS BUDGETARY IMPACT**

# NCBiotech is Unique

- No one organization focuses on life science
- NCBiotech is the catalyst
- Other states created biotech centers
  - Maryland
  - Massachusetts
  - Georgia
- Competitive programs from Texas, Ohio, more

# Budgetary Impact

- No one entity would advocate for life science.
- Continuity would be lost.
- Other states would recruit our companies.
- Massachusetts, Texas and California are already growing faster.



# The Next Big Thing

## *Biotech Job Creation: The Path to Success*

| INNOVATION  |                | CAPITAL   |                | INFRASTRUCTURE   |                  | LABOR  |                            |
|---|----------------|---|----------------|--|------------------|--|----------------------------|
| <b>Target ag biotech development</b><br>• Biotech Crop Commercialization<br>• Portal to ease market entry                 | \$450K/yr (BC) | <b>Reinstate and expand state support for SBIR/STTR matching grant program</b>  | \$5M/yr (DOC)  | <b>Initiate life-science site and infrastructure readiness program</b><br>• Water/wastewater<br>• Other utilities<br>• Site improvements | \$10 – 25M (DOC) | <b>Restore NCBioImpact funding to pre-recession levels</b>                                       | \$2.5 – 3M/yr (UNC/ NCCCS) |
| <b>Complete Pilot Extraction Facility</b>   | \$1M (BC)      | <b>Expand NCBiotech loan program</b><br>• Early-stage<br>• Growth   | \$2.5M/yr (BC) | <b>Create incubator facilities in regional clusters</b>  | \$500K (BC)      | <b>Increase teacher development in biotech-related subjects</b><br>• Outreach to charter schools | \$500K/yr (BC)             |
|   |                | <b>Relieve tax burden</b><br>• QBV Tax Credit expansion<br>• Capital gains tax relief<br>• Sales tax exemption for research | TBD            | <b>Establish funding for small-company attraction, expansion and retention</b>   | \$1M/yr (BC)     |  |                            |
| LONG TERM   |                | LONG TERM   |                | LONG TERM  |                  | LONG TERM  |                            |
| <b>Continue development of biotechnology-related sectors</b><br>• Vaccine consortium<br>• Cancer research<br>• Biodefense | TBD            | <b>Create strategic investment fund for VCs that locate in N.C. and invest in N.C. companies</b>                            | TBD            | <b>Loan guarantees, with revenue other than state funds</b>  | TBD              | <b>Further develop Biomanufacturing Training and Education Center</b>                            | TBD                        |
| <b>Improve university technology transfer</b>   | TBD            |   |                |  |                  | <b>Develop Professional Science Masters programs</b>   | TBD                        |

Lead Agencies: BC–Biotechnology Center    DOC–Department of Commerce    UNC–University of North Carolina    NCCCS–North Carolina Community College System

NORTH CAROLINA BIOTECHNOLOGY CENTER

[ncbiotech.org](http://ncbiotech.org)

NORTH CAROLINA BIOTECHNOLOGY CENTER

Thank you for your time.